

## Notice of Allowability

Application No.

10/708,565

Examiner

Patricia L. Hailey

Applicant(s)

GORDON ET AL.

Art Unit

1755

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' remarks and amendments, filed on January 11, 2007.
2. ☒ The allowed claim(s) is/are 1,3,5,6,8-10,12,14-17,62-64 and 68-76.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20070204</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|  | 9. <input type="checkbox"/> Other _____.   |

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Applicants' remarks and amendments, filed on January 11, 2007, have been carefully considered. Claims 2 and 13 have been canceled; claims 62-76 have been added.

Claims 1, 3-12, and 14-76 are now pending in this application.

### ***Election/Restrictions***

1. Claims 18-61 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method of diffusing a catalyst (claims 18-31), and drawn to a non-elected gas diffusion electrode (claims 32-61), there being no allowable generic or linking claim. Election was made **without** traverse in the previous Office Action, dated September 10, 2006.

### ***Withdrawn Rejections***

The following rejections have been withdrawn in view of Applicants' amendments and persuasive arguments:

- a. The 102(b) rejection of claims 1, 3, 6, 8-12, and 14-17 as being anticipated by Tseung et al. (U. S. Patent No. 3,922,204),
- b. The 102(b) rejection of claims 1, 3, and 6 as being anticipated by Munakata et al. (U. S. Patent No. 6,060,420),
- c. The 103(a) rejection of claims 8-12 and 14-17 as being unpatentable over Tseung et al. (U. S. Patent No. 3,922,204), and

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- d. The 103(a) rejection of claims 8-12 and 14-17 as being unpatentable over Munakata et al. (U. S. Patent No. 6,060,420).

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Fonda on March 26, 2007.

*The application has been amended as follows:*

a. *Please cancel non-elected claims 18-61.*

b. *Please rewrite claim 1 as follows:*

1. (Currently Amended) *A catalyst for use in the electrochemical reduction of oxygen comprising:*

*a perovskite-type compound having alpha and beta sites and comprising the formula  $A_{1-x}A'_x(B_{1-y}B'_y)_zO_{3-\delta}$  where x, y, and z are mole fractions and z is greater than 1.0 and wherein A is a metal selected from the group consisting of La, Pr and Nd, {and} A' [comprise] is one or more metals selected from the group consisting essentially of K, Rb, Cs, Ca, Sr, and Ba, and wherein B is a metal*

selected from the group consisting essentially of Mn and Co, and B' [comprise] is one or more metals selected from the group consisting essentially of Fe and Ni.

c. Please rewrite claim 10 as follows:

10. (Currently Amended) A catalyst for use in the electrochemical reduction of oxygen having a composition represented by the formula  $Nd_{1-x}Ca_x(Mn_{1-y}Fe_y)_zO_{3-\delta}$ , wherein  $z$  is greater than 0.95, wherein  $x$  has a value in the range of about 0.01 to about 0.9;  $y$  has a value in the range of about 0.0 to about 0.9;  $\delta$  has a value in the range of about -0.3 to about 0.3.

d. Please cancel claims 4, 7, 11, and 65-67.

e. In line 1 of claim 12, please change "11" to "10", and delete the first "about".

Claims 1 and 10 have been amended to incorporate the allowable subject matter of claims 4 and 11, respectively. Claims 7 and 65-67, dependent from and derived from original claim 4, respectively, were canceled to eliminate claim redundancy.

#### ***Allowable Subject Matter***

Claims 1, 3, 5, 6, 8-10, 12, 14-17, 62-64, and 68-76 are allowed.

***Reasons for Allowance***

Although the cited references of record disclose catalyst similar to that recited in the instant claims, neither reference meets the claim limitation wherein "z is greater than 1.0." In the aforementioned prior art, the mole fractions corresponding to Applicants' B or B' (the mole fraction represented by the variable "z") is 1, or less than 1.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

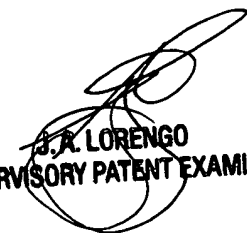
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
April 2, 2007

  
J. A. LORENGO  
SUPERVISORY PATENT EXAMINER